

operations 1



# Oetiker Success Story

How Oetiker increases overall equipment effectiveness (OEE) with digital maintenance

# About Oetiker

Oetiker Group is a Switzerland-based worldwide leader in delivering high-end connecting solutions. Oetiker is the leader in high-end clamps, rings, straps and quick connectors for a wide range of mobility and industrial applications. Oetiker's high-performing connecting and assembly solutions provide peace of mind for customers in automotive, commercial and industrial markets.

The company offers a 360-degree solution approach integrating connecting, assembly and global engineering services.

The Oetiker Group has 13 production plants worldwide and currently has more than 2,000 employees.



"Using a digitized maintenance approach, we were able to increase overall equipment effectiveness by 11%P after just 6 months."

Jacob Reid  
Head Engineering  
Oetiker Group

## The challenge

When Oetiker started the global implementation of Operations1 in 2021, the target picture was quite clear. The provider of high-end connecting solutions took the approach of fully digitizing their lean-based maintenance system. A cloud-based solution like Operations1 proved to be the appropriate technology to do this. The decision in favor of the Frankfurt-based start-up was, among other factors, based on the fact that the software solution can be seamlessly integrated into the existing system landscape.

As a result, analog and paper-based maintenance tasks at 6 of 13 Oetiker production sites were replaced by digitized processes, and the complexity for employees was significantly reduced thanks to the intuitive and machine-specific digital checklists. The positive impact showed up quickly: as a result of the digitization of preventive maintenance processes, overall plant effectiveness at the Canadian site increased by 11 percentage points – for Oetiker, the successful start of a digitization journey that has only just begun.

**+11%P**

OEE AFTER SIX MONTHS

**+5%P**

EQUIPMENT AVAILABILITY

**-23%**

MEAN TIME TO REPAIR

SUCCESS STORY

## Execution of maintenance work was primarily manual

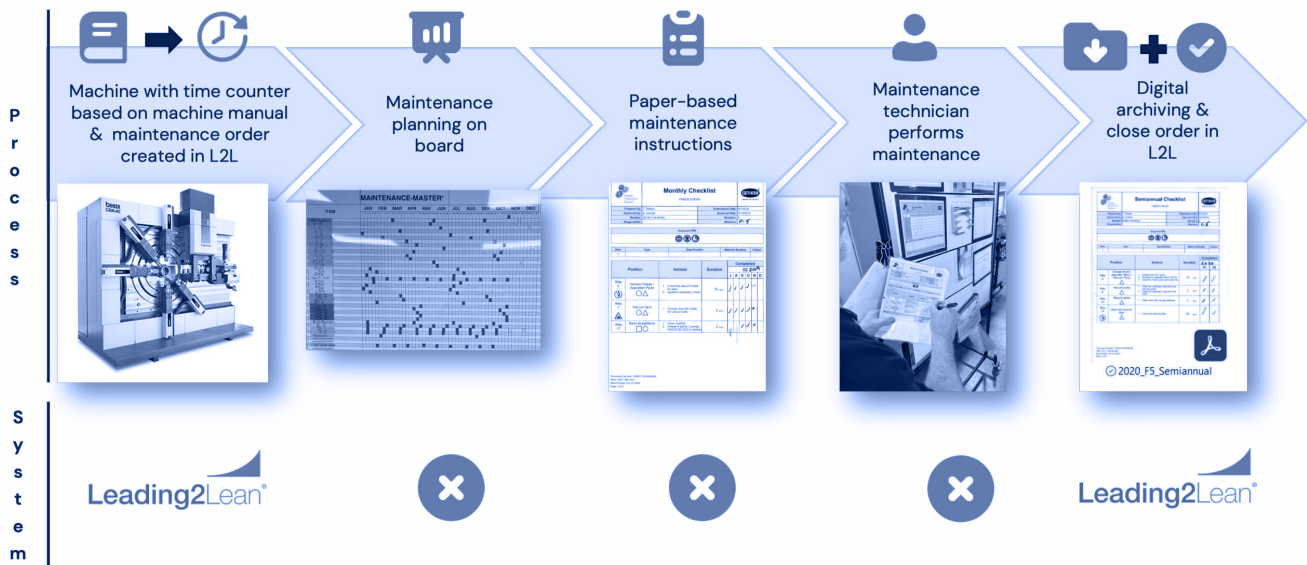
Although Oetiker established a global lean manufacturing culture early on and used basic methodologies such as Visual Management, 5S and Total Productive Maintenance in all production sites, the full digitalization of the operational organization did not take place until 2020. In that year the company started implementing the global Manufacturing Execution System (MES) called Leading2Lean. This enabled the very first technological communication with the machines and equipment, providing answers to basic questions – such as machine running times, runtime duration, interruptions and their reasons, and necessary maintenance cycles.

Although this information could be used to set up maintenance periods, the detailed planning of the maintenance work itself still had to be done manually via Excel, Outlook and magnetic boards. This was related to time and resource-consuming paper-based maintenance processes with media and system disruptions, a lack of transparency and difficult reporting.



The individual challenges of paper-based maintenance particularly affected three aspects: the handling of documentation, process management, and the lack of global perspective.

Document handling, which consisted of analog creation, approval, revision, distribution and digital storage, was extremely time-consuming due to the manual approach to things and media disruptions. This is because, to date, hundreds of systems at Oetiker have to be maintained at different cycles on a daily, weekly, monthly, semi-annual or annual basis. In addition, there are machine specific variances per location. As manual processes are not able to reflect this variety in breadth, a potential for error was always present.



## SUCCESS STORY

As to processes, the main issue was the non-existing single point of truth for document management, maintenance planning and documentation. In document management, there was also the risk of version chaos and poorly developed revision control. Because paper-based documentation was not complete, it was difficult to analyze maintenance processes. Looking at the entire company with all its national and international production plants, it is evident that the above mentioned factors delayed the development of a global standardization in maintenance procedures.



### Paper-based maintenance processes led to:

- ✓ a high effort for document preparation
- ✓ difficulty in ensuring that documents were up to date
- ✓ issues with machine-specific checklists
- ✓ lack of a single source of truth for maintenance planning, execution and documentation
- ✓ non-transparent reporting
- ✓ low sustainability

## Creation of efficient maintenance processes with Operations1

Operations1 proved to be a good sparring partner on the way to global digitization of employee-led maintenance processes. The B2B software company from Frankfurt was chosen because of its seamless integration with Leading2Lean, its fast implementation and its high user-friendliness. The software solution is also extremely scalable due to its modular structure, multilingualism, and the possibility to map different machine types through structure classes in the backend.

Implementing Operations1 in daily tasks caused a considerable simplification of work processes for employees. Now the right employee receives the maintenance instructions they need at the right time. In addition, maintenance is carried out completely digitally by means of intuitive checklists and inspection protocols. Here, workers go through maintenance instructions step by step via the touchscreen tablet, and detailed machine-specific instructions can also be mapped digitally.

In addition, all documents, that use to be stored in paper mountains, are now aggregated in a single point of truth that is up-to-date and retrievable from any location at any time of day or night.

This significantly reduces maintenance complexity and increases transparency thanks to real-time process data and automatically generated reports. Machine downtime can also be avoided thanks to better planning and regular maintenance.

The well-maintained machines now create a safe and modern working environment for employees. Last but not least, such an efficient maintenance process enables autonomous preventive maintenance, which allows workers to perform minor maintenance tasks themselves.



## Significant OEE increase as a consequence of digitized maintenance

Oetiker has set itself lofty goals for the complete digitization of maintenance. The company aims at achieving 85%P of overall equipment effectiveness (OEE) in the long term. This is regarded as an important key figure for plant productivity and an increase can accordingly secure long-term revenue.

In order to achieve this figure, the market leader set itself sub-targets. For example, just 6 months after implementing Operations1, overall plant effectiveness at the Canadian site had already increased by 11%P. This happened alongside a 5%P increase in plant availability, while in parallel the mean time to repair (MTTR), i.e. the average repair time after a machine has stopped working, has decreased by 23%.

These figures speak for themselves, showing that the potential of digital maintenance is far from exhausted. 6 out of 13 Oetiker production sites worldwide have gone digital so far and the company has already made plans to roll out the software in other 4. The optimization of maintenance processes will therefore gain even more ground in the future.



"With Operations1, we are establishing a global standard for preventive maintenance in our 13 plants."

Susanne Conrad  
Head Equipment Engineering  
Oetiker Group

Here is why Oetiker chose Operations1:

- ✓ Cloud based solution
- ✓ Implementation of L2L-Integration and automation
- ✓ Implementation of machine-specific variant configuration
- ✓ Multilingual software

## The advantages at a glance:

✓ Prevention of machine breakdowns, high repair and spare parts costs

✓ Greater flexibility in staff allocation thanks to autonomous maintenance

✓ Elimination of non-value-added documentation activities

✓ Increased auditing reliability due to fully traceable maintenance activities

✓ Modern and safe working environment for employees due to well-maintained machines at all times

✓ Significant increase in overall equipment effectiveness (OEE)

✓ More efficient maintenance processes in planning & execution

✓ Audit security for customer audits through complete documentation and automatically generated reports

## Market leaders rely on Operations<sup>1</sup> for maintenance



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operations<sup>1</sup>

# Operational Excellence on the shopfloor

With Operations1, your employee-led processes become more secure, efficient and transparent. Increase your productivity, reduce error rates and optimize your operational processes flexibly and continuously.

**Do you have any further questions? Contact us!**

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